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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/988,112 11/19/2001 Marcelo Daniel Baru Fassio N164 0024 GNM/sks 8074 **EXAMINER** 720 7590 05/05/2004 OYEN, WIGGS, GREEN & MUTALA NASSER, ROBERT L 480 - THE STATION **ART UNIT** PAPER NUMBER **601 WEST CORDOVA STREET** VANCOUVER, BC V6B 1G1 3736 CANADA DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |                                 | · · · · · · · · · · · · · · · · · · · |
|---|---------------------------------|---------------------------------------|
|   | Application No.                 | Applicant(s)                          |
| Office Action Summary   | 09/988,112                      | BARU FASSIO, MARCELO<br>DANIEL        |
|   | Examiner                        | Art Unit                              |
| The MAILING DATE of this communication and  | Robert L. Nasser                | 3736                                  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |                                 |                                       |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                                 |                                       |
| Status  |                                 |                                       |
| <ol> <li>Responsive to communication(s) filed on <u>06 February 2003</u>.</li> <li>This action is FINAL.</li> <li>Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213.</li> </ol>   |                                 |                                       |
| Disposition of Claims   |                                 |                                       |
| 4)  Claim(s) 29-46 is/are pending in the application 4a) Of the above claim(s) is/are withdraw 5)  Claim(s) is/are allowed. 6)  Claim(s) 29-46 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/or   | vn from consideration.          |                                       |
| Application Papers  |                                 |                                       |
| 9) The specification is objected to by the Examiner.  |                                 |                                       |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  |                                 |                                       |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |                                 |                                       |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |                                 |                                       |
| Priority under 35 U.S.C. § 119  |                                 |                                       |
| 12) Acknowledgment is made of a claim for foreign   | priority under 35 H S C & 119/a | \_(d) or (f)                          |
| a) All b) Some * c) None of:  1. Certified copies of the priority documents   |                                 | <i>j</i> -(u) or (r).                 |
| 2. Certified copies of the priority documents have been received in Application No  |                                 |                                       |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage   |                                 |                                       |
| application from the International Bureau (PCT Rule 17.2(a)).   |                                 |                                       |
| * See the attached detailed Office action for a list of the certified copies not received.  |                                 |                                       |
|   |                                 |                                       |
| Attachment(s)   | _                               |                                       |
| Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 4)                              |                                       |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2, 3.  |                                 | Patent Application (PTO-152)          |

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 29-46 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 29 recites that the preamplifier receives the signal from the electrode wires. However, in the specification, it is clear that the signal from the electrode wires passes through the protection circuitry prior to reaching the preamplifier. Therefore, this feature lacks an adequate written description in the specification. Since the subject matter was added via amendment, it constitutes new matter.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 29-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 29, line 4, it is unclear whether the electrode wires referred to are the same electrode wires recited in the preamble.

Before applying art, it is the examiner's opinion that the preamble breathes life and meaning into the claim and that the claim is not drawn to a mere amplifier with multiple uses, but rather an amplifier for specifically processing a signal from a nerve

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electrode and producing an output indicative of the electrically activity in the nerve. If applicant disagrees with this interpretation, applicant should state the different interpretation on the record.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 29, 31, 32, and 40-46 are rejected under 35 U.S.C. 102(b) as being anticipated by the Papathanasiou article entitled "An implantable CMOS Signal . . . . " (hereinafter Papa). Papa shows a circuit receiving a signal from a nerve on a common line that passes through a filter to 2 amplifiers (see p. v-238, left column, line 30), where the amplifiers appear to have the recited structure via mosfets M1 and M2. The second protection circuit is not a resistor in parallel with a capacitor. However, the examiner takes official notice that a resistor/capacitor in parallel is a known filter circuit and is readily interchangeable with the filter of Papa. In addition, since the circuit is used fro the identical purpose as the current circuit, it would have the same operating parameters, recited in claims 40-46.

Claims 30 and 33-39 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, first and second paragraphs, set forth in this Office action, and to include all of the features of the independent claims. Claim 30 defines over the art of record in that none of the art has the current mirror, as claimed. Claim 33 defines over the art in that none of the art has the DC restoration circuit. Claims 34-39

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define over the art of record in that none of the art has the bandpass amplifier, as recited. as none of the art shows a circuit for amplifying a signal from a nerve that has the two protection stages recited in the claim.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Schulman, Durand. And Mower show circuits for amplifying signals sensed from a nerve.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert L. Nasser whose telephone number is (703) 308-3251. The examiner can normally be reached on Mon-Fri, variable hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (703) 308-3130. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Primary Examiner Art Unit 3736

RLN April 30, 2004

> ROBERT L. NASSER PRIMARY EXAMINER